

# CGSC

# Notes

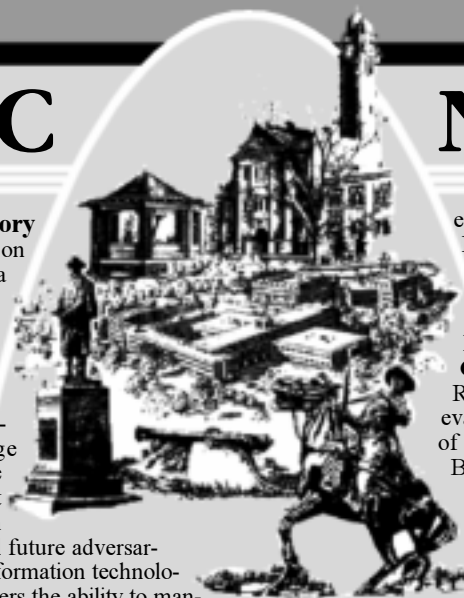
## Battle Command Battle Laboratory

**Futures Lab.** Construction to begin on Futures Lab 1 April 1999 marks a major milestone in solving digitized force command and control (C<sup>2</sup>) challenges with the construction of the Battle Command Futures Lab, a new state-of-the-art experimentation facility. Located at the US Army Command and General Staff College (CGSC), this facility will support the Army's ongoing efforts to exploit 21st-century technology to maintain information superiority over potential future adversaries. The Futures Lab will develop information technologies that provide battlefield commanders the ability to manage, synthesize and employ enormous volumes of data and information provided by advanced communications and sensor technology. The Army's advance toward digitization will fundamentally alter the decision-making framework between a commander and his staff. The shift will be away from a staff-centered, methodical and laborious analytical process, to a commander-centric, technology-enhanced, rapid decision-making process. Numerous Army research and development programs are focused on facilitating this shift in the decision-making paradigm. The Futures Lab will provide a robust capability to experiment with and integrate emerging cognitive processes, enabling technologies and organizational structures. Construction on the \$1.4 million facility is expected to last six months, with the first experiment being conducted in the facility during the 1st Quarter of fiscal year 2000 (FY00).

**Strike Force.** Battle Command Battle Lab-Leavenworth (BCBL-L) is conducting a series of Strike Force (SF) experiments for the development of the Operations and Information (O & I) node of the near-term SF Headquarters (HQS) as well as developing insights as how to transition the near-term effort to a FY 2005 HQS with new joint command, control, communications, computer, intelligence, surveillance and reconnaissance (C<sup>4</sup>ISR) capabilities. New technologies from Defense Advanced Research Projects Agency's (DARPA's) Command Post of the Future (CPOF) coupled with the Army Communications-Electronics Command's (CECOM's) CP XXI Advanced Technology Demonstration (ATD) will allow the Army to explore ways to make the CPs more decision focused versus staff focused and determine what capabilities are needed for future C<sup>2</sup> systems. The Training, Leader Development and Soldier (TLS) Task Force will develop a new training and leader/soldier strategy to support SF experimentation, which will set the conditions for the Army to transition along the Army Experimental Campaign Axes (AECA) to Army After Next (AAN).

## Next-Generation Display Technologies on the Horizon.

Battle Command Battle Lab joint research and development efforts will yield several innovative displays available for experimentation in the near future. Prototype head-mounted displays include the virtual-retinal and liquid-crystal display varieties. Prototype interactive large-screen displays include tileable, flat-panel displays that are scaleable and seamless from a 35-inch diagonal, up to more than 100 inches, with megapixel resolutions. This capability will allow the user to use a single flat panel as a building block for electronically selecting the size of display desired, as well as a "paper map" look. The R&D community will be experimenting with a "family of displays" to determine display requirements across



echelons and battlefield functional areas. Research partners include Army Research Lab, Communication Electronics Research, Development and Engineering Center (RDEC), DARPA and other Battle Labs.

**CPOF** is a DARPA-sponsored five-year R&D program to design, develop, test and evaluate a prototype Joint Command Post of the future. DARPA is working with BCBL-L and the Marine Corps Warfighting Lab (MCWL) at Quantico, Virginia who serve as Operational Advocates (OAs) to the program manager. BCBL-L is the lead service for the OA team. The CPOF program goal will improve the speed and quality of command

decision making while enhancing the mobility and survivability of the command complex. CPOF is presented as a concept environment and not a fixed or stationary C<sup>2</sup> facility. DARPA's approach is to provide an intuitive, well-integrated, easy-to-use, decision-centered information environment where a commander and staff can quickly understand the changing battlefield situation, select and communicate the best course of action (COA) to the implementing units and monitor execution. Key technology capabilities targeted for development are integrated visualization environments, comprehensive human-computer and human-human interaction capability (speech and gesture understanding, language understanding, dialog and visual collaboration), a CP context tracking and dialog manager and an integrated suite of knowledge bases, intelligent agents, plan sentinels, information processing and a modular portable suite of hardware and software components. The CPOF kickoff meeting was held in San Diego, California, 22-26 February 1999. The agenda consisted of briefings and workshops designed to identify issues and map out development and experimentation plans.

**Department of Joint and Multinational Operations** (DJMO) has undertaken several initiatives in response to emerging operations and technologies.

US Air Force Majors Randall Buddish and Valerie Moore and Mr. John Wallace Director of Installation Management (DOIM) have upgraded the Global Command and Control System (GCCS) terminals and substantially modernized the classroom. The three have expertly developed a course, "Advanced GCCS (JOPES)", that familiarizes students with the software applications supporting the Joint Operation Planning and Execution System (JOPES). Familiarization with GCCS applications, including the Joint Flow and Analysis System for Transportation (JFAST), complement a broader understanding of how CINCs plan and execute strategic movement to support operational warfighting. A course detailing the Army-specific "GCCS-A" is forthcoming.

Lieutenant Colonel Deborah Gregoire and Major Dusty Tyson have created courses titled "Space Orientation" and "Space Operations" to provide students with a basic understanding of US and international space policy. The courses include studies of the physical characteristics of space and a more in-depth understanding of space forces and systems supporting warfighting. The courses examine US military doctrine and operations concepts connected with space, including strategic defense and the current space asset capabilities available to the US and other nations for military use.

Lieutenant Colonel Mike Carney's Information Operations (IO) course examines IO at the operational and strategic levels. The course surveys the strategic environment, national policy, DOD and other agencies' roles and capabilities, joint and service doctrine and capabilities, the threat and IO in campaign planning.

Lieutenant Commander John Pritchett has rewritten the Advanced Application Program (AAP), "Africa Strategic Studies." The course focuses on assessing the impact of the historical, cultural and natural Sub-Saharan African environment on the region's economic, political and social dynamics to discern US interests and objectives in developing US military policies and programs to achieve US interests and objectives through regional strategic estimates and theater engagement plans.

Additional information about these initiatives is available on the DJMO home page at:

<<http://www.cgsc.army.mil/djco/index.htm>>.

**Center for Army Leadership (CAL):** In October 1998, US Army Forces Command, working with Training and Doctrine Command-Combined Arms, initiated a leader development program at the National Training Center (NTC), Fort Irwin, California. The program was recently piloted at the Joint Readiness Training Center (JRTC), Fort Polk, Louisiana, in March 1999. The leader development program involves an introduction to the new US Army Field Manual 22-100, *Army Leadership*, unit climate assessments and feedback before a rotation, during rotation leadership coaching by observer/controllers (O/Cs) and a postrotation unit climate/leadership after-action review (AAR). The program enhances the current combat training center (CTC) training methodology by facilitating individual discovery learning through a minimum of two individual AARs during a CTC rotation. Through this coaching methodology, leaders discuss how their leadership contributed or can be improved to contribute to unit success in the next battle or beyond. At the end of the rotation, leaders identify their leadership successes and developmental needs in a final individual AAR with their O/C. All individual AARs are private sessions between the O/C and his counterpart.

Keys to the program involve the introduction of an individual training methodology focused on leadership development, coupled with the power of the CTC environment and facilitated discovery learning. While the leader development program is only in its infancy, it shows great promise as a leader-training model for the Total Army and can contribute to shaping leaders well into the future.

**Leadership Instruction Division (LID).** The CGSOC offers an Advanced Applications Program (AAP) to provide CGSOC resident students the opportunity to enhance both personal and professional growth while conducting advanced studies related to the common curriculum. During Academic Year 1998/99, the LID offered 14 AAPs designed to broaden students' professional leadership development and assist in their transition to organizational-level leadership. Courses offered this year were:

- Military Ethics Seminar
- Conceptual Skills for Military Problem Solving
- Leadership in Battle
- Leading the Army Through Change
- Training with Simulations
- Training in Units
- Administrative Law for Commanders
- Military Law for Commanders
- Operational Law for Commanders

- Special Law Project
- Military and the Media
- Public Affairs in Operational Planning
- Research in Military Law
- Leadership and Training Special Project

For additional information about AAPs and other LID programs, please visit the LID homepage at:

<<http://www.cgsc.army.mil/cal/lid/>>.

**Civilian Leadership Training Division (CLTD):**

**LEAD Program.** A review of the LEAD (Leadership Education and Development) program for first-time supervisors of civilian employees is under way. The Army has undergone tremendous change since the LEAD program was established more than 10 years ago, and it is important that the program continue to best meet the Army's needs using the most cost-effective means. This review is a top-to-bottom, complete analysis of every aspect of the course.

**OLE Program.** CLTD is conducting a needs assessment to determine the degree to which the Organizational Leadership for Executives (OLE) course meets the needs of the field. The assessment includes surveying all 1997 and 1998 OLE graduates, their supervisors, peers and followers to determine OLE's impact on the graduate's performance as a leader.

**Organizational Assessment and Development.** CLTD is providing organizational development services to CHRMA (Civilian Human Resources Management Agency), United States Army Europe (USAREUR). Following interviews with key leaders and an organizational climate survey that was completed by 72 percent of the organization's members, a decision was made to conduct a series of two and one-half day sessions from January through June 1999. Each CHRMA member attends one session to participate in team-building activities and receive feedback on the data obtained during the organizational assessment.

For more information, visit our web address at: <<http://www.cgsc.army.mil/cal/cltd/cltdfr.htm>> or contact LTC Rob Schwartzman, DSN 585-3558 or Mr. Frank Loeffler at DSN 585-3556.

**The Leadership Research and Assessment Division (LRAD)** has completed the first of two initial assessments of 360-degree leadership assessment in operational units.

This assessment is a leader development program that provides a leader with doctrinally based leadership feedback from peers, subordinates and superiors, along with a self-assessment. The pilot program seeks to determine the value and feasibility of 360-degree leadership assessment for leaders in operational modification table of organization and equipment units. This first pilot was conducted in a III Corps Artillery Field Artillery Brigade at Fort Sill, Oklahoma. An initial program evaluation indicates that all participating leaders found the feedback they received to be valuable. Over 80 percent of the targeted leaders indicated that the feedback provided them new information about their leadership styles and motivated them to change their leadership methods in some manner. Overall, program feedback from leaders supports the notion that conducting 360-degree assessment with leaders in key jobs during operational assignments has value for the leader. Additionally, raters of targeted leaders provided information indicating that the pilot process was generally sound and seemed to be having a positive effect on leaders. Data collected from the unit three months after the original program assessment supports these findings. A second unit pilot, being conducted with a Brigade Combat Team from 4th Infantry Division (Mechanized), should be completed in the 3rd quarter of Fiscal Year 1999.